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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Oliver Voelckers

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27387

7590

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EXAMINER

PERVAN, MICHAEL

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/501,367	Applicant(s) VOELCKERS, OLIVER	
	Examiner Michael Pervan	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/11/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason (US 5,841,373) in view of Comerford et al (US 5,963,671).

In regards to claim 1, Mason discloses method for input of text by selecting of letters using a cursor (Fig. 1 and col. 3, lines 9-23), wherein the text input is performed as a selection of letters by means of a graphical and/or audible cursor (Fig. 1 and col. 3, lines 9-23).

Mason does not disclose letters, which are weighted according to a method of frequency statistics of letter sequences.

Comerford discloses letters, which are weighted according to a method of frequency statistics of letter sequences (col. 3, lines 22-24).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

In regards to claim 2, Mason does not disclose method for input of according to claim 1, wherein the frequencies of the occurrences of all possible letter combinations are derived once from a representative sample text and for every input a probability for the following letter is calculated from these frequencies in conjunction with the preceding input letter sequence, whereas the size of the displayed cursor is proportional

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to the calculated probability of the associated letter at this position of the input sequence.

Comerford discloses method for input of according to claim 1, wherein the frequencies of the occurrences of all possible letter combinations are derived once from a representative sample text and for every input a probability for the following letter is calculated from these frequencies in conjunction with the preceding input letter sequence (col. 4, lines 1-12).

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

Mason and Comerford disclose the size of the displayed cursor is proportional to the calculated probability of the associated letter at this position of the input sequence. Since, Mason teaches a cursor (box cursor 30) that surrounds the letter (character) to be selected and Comerford teaches increasing the size of the letters most likely to be selected, when Comerford is incorporated into Mason, the cursor will change size according the current letter selected, which is determined from the probability of the next most likely letter to be chosen.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of Comerford et al in further view of Imaizumi et al (US 6,236,389).

In regards to claim 3, Mason and Comerford do not disclose method according to claim 1, wherein an indicator shaped like a dot is displayed at the bottom of a rectangular cursor that can be moved with a constant speed horizontally or vertically along letters of a letter repertoire shown with a variable size and the direction of the indicator movement depends on the activation of a cursor control unit by a user.

Imaizumi discloses method according to claim 1, wherein an indicator shaped like a dot is displayed at the bottom of a rectangular cursor that can be moved with a constant speed horizontally or vertically along letters of a letter repertoire shown with a variable size and the direction of the indicator movement depends on the activation of a cursor control unit by a user (Fig. 6 and col. 7, lines 27-36; as can be seen in the drawing the indicator dot (cursor CU) has a up to four arrows around it indicating the direction the rectangular cursor (trimming frame TF) can be moved in).

It would have been be obvious at the time of invention to modify Mason and Comerford with the teachings of Imaizumi, moving a cursor (cursor CU) inside another cursor (trimming frame TF), by incorporating the teachings of Imaizumi into the device of Mason and Comerford because it gives the user more accuracy when moving the cursor.

5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mason in view of Comerford et al in further view of Applicant's Admitted Prior Art (APA).

In regards to claim 4, Mason and Comerford do not disclose method according to claim 1, wherein the difference between the display of the largest and the smallest letter

can be selected by the user in several steps, allowing to select either a constant size of all letters or gradually a growing diversity.

Mason and Comerford disclose enlarging the size of the letters most likely to be chosen next (col. 3, lines 16-24).

APA discloses having all the letters being the same size (Fig. 2).

It would have been obvious at the time of invention to modify Mason and Comerford with the teachings of the APA, all the letters having the same size, by incorporating the teachings of the APA into the device of Mason and Comerford because it gives the user more letter emphasizing options.

In regards to claim 5, Mason discloses method according to claim 1, wherein a moving cursor is moved across a displayed letter set on a display connected to a micro controller (col. 3, lines 43-50; display panel must be connected to the computer (microcontroller) in order for the program to display the letters and input message), and the cursor highlights exactly one of the letters of the letter set (Fig. 2; cursor (cursor box 30) highlights exactly one letter).

Mason does not disclose the size of the cursor is adjusted proportionally to the probability of the occurrence of this specific letter, this probability being computed on the basis of the preceding letter sequence stored in an input buffer as well as on the basis of a frequency table that is read from a non-volatile memory by the microcontroller.

Comerford discloses the size of the cursor is adjusted proportionally to the probability of the occurrence of this specific letter, this probability being computed on

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the basis of the preceding letter sequence stored in an input buffer as well as on the basis of a frequency table that is read from a non-volatile memory by the microcontroller.

It would have been obvious at the time of invention to modify Mason with the teachings of Comerford, the size of the letters is changed to emphasize the letters (characters) most likely to be selected, by incorporating the teachings of Comerford into the device of Mason because it allows the user to find the letters (characters) more quickly (col. 3, lines 16-19).

In regards to claim 6, Mason discloses device for carrying out said method according to claim 1, wherein a cursor control unit 11 (col. 2, lines 61-62) is connected via a software interface with a micro controller 12 that interprets data supplied by the cursor control unit (col. 3, lines 43-50; display panel must be connected to the computer (microcontroller) in order for the program to display the letters and input message), and the microcontroller 12 is connected to a read only memory 17 and with an input buffer random access memory 18 (col. 3, lines 43-50; microcontroller (computer) must be connected to some form of memory in order for the program to display the letters and input message) and the micro controller 12 delivers data shown on a display 13 (col. 3, lines 43-50; display panel must be connected to the computer (microcontroller) in order for the program to display the letters and input message).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art (Hermann US 5,270,689) is deemed relevant since it discusses a cursor highlighting exactly one letter, memory, and emphasis of letters.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art (Niemeier US 5,574,482) is deemed relevant since it discusses emphasis of letters based on probability.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pervan whose telephone number is (571) 272-0910. The examiner can normally be reached on Monday - Friday between 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MVP
Dec. 7, 2006

AMR A. AWAD
SUPERVISORY PATENT EXAMINER
